

**DRPT Rail Enhancement Fund
Project Application Form**

Applicant:

Virginia Port Authority
600 World Trade Center
Norfolk, VA 23510

Contact Information:

Responsible Person/Title: Jeff Florin/Chief Engineer

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Project Title: Craney Island Rail Connector

Project Location:

Runs southwest from proposed Craney Island Marine Terminal (CIMT) to APM Terminal, and then runs west parallel to Commonwealth Railway along median of Route 164 Western Freeway to Route 17.

Project Description/Objective:

The Virginia Port Authority (VPA) is in the process of preparing concept plans for the Craney Island Rail Connector (CIRC), a multimodal rail corridor connecting the future Craney Island Marine Terminal (CIMT) on the Craney Island Dredged Material Management Area (CIDMMA) Eastward Expansion to the Commonwealth Railway mainline track. The CIRC will run southwest from the CIMT, through the APM Terminal interface, and then west along the median of the Route 164 Western Freeway, parallel to the Commonwealth Railway mainline track where it will intersect with the mainline track at the bridged overpass at Route 164 and Route 17.

The need for the CIRC is driven by the requirement of the planned CIMT to be operational by early 2017, and be able to transport up to 50% of the terminal's inbound and outbound containerized cargo by rail. The CIRC will provide direct rail access to CIMT, and serve as a siding track parallel to the mainline, providing flexibility of access to multiple rail operators simultaneously. This will increase the operational capacity of the Commonwealth Railway to allow the APM Terminal to stage and sequence long trains without obstructing CIMT inbound or outbound rail flow on the mainline track. The project will reduce congestion and movement delays at the APM rail interface, thus contributing to the reduction of future rail network congestion problems elsewhere in the region.

The CIRC will run southwest out of the CIMT, passing through four major and several smaller land properties, including the APM Terminal; the U.S. Coast Guard Station, Portsmouth; the U.S. Navy Craney Island Fuel Depot; and the City of Portsmouth landfill. The CIRC corridor will also affect the Churchland and Cedar Lane Areas of Portsmouth. Discussions are underway with each of these stake holders regarding the routing and respective impacts of the CIRC corridor. Figure 1 shows the alignment of the proposed CIRC corridor and affected properties.

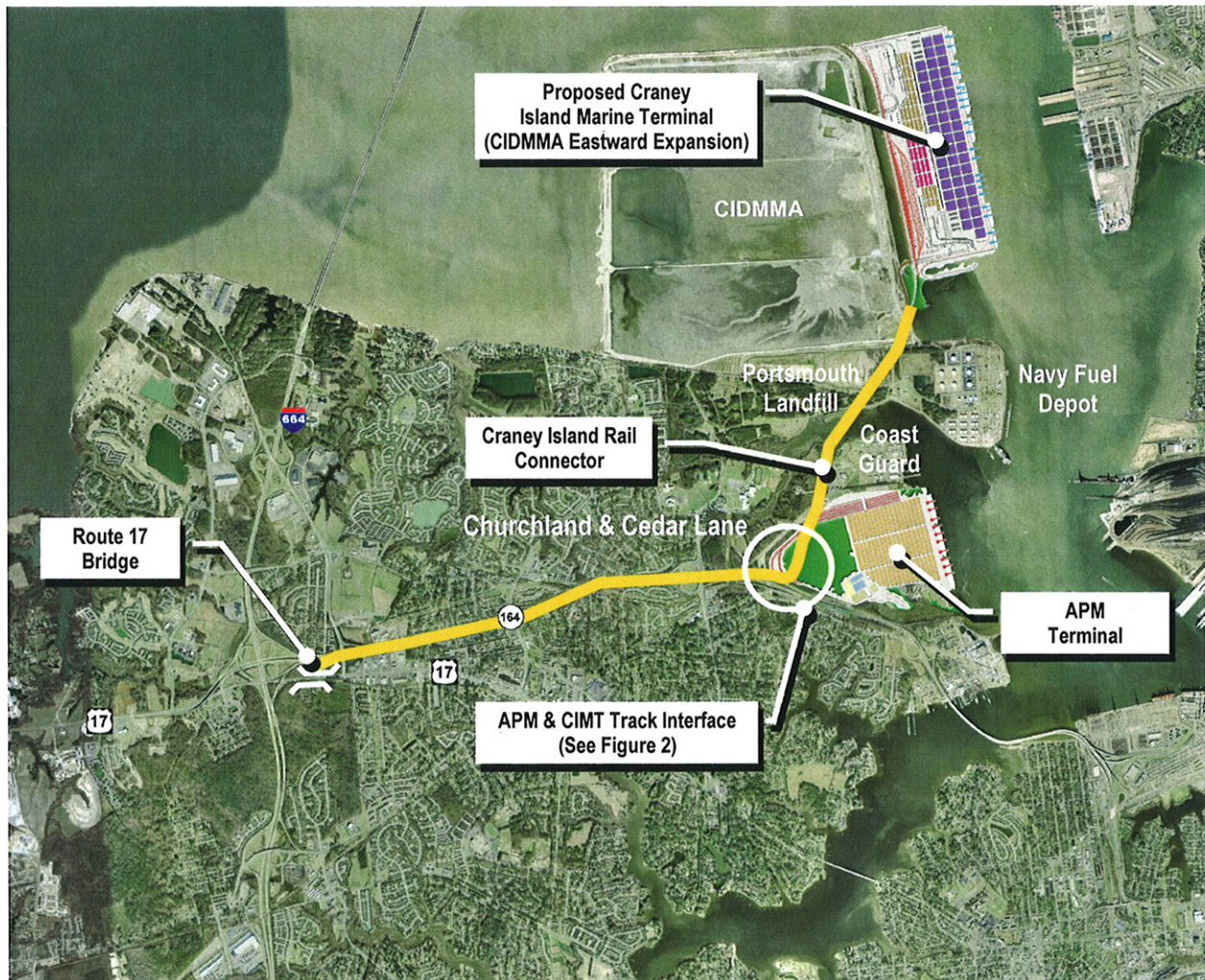


Figure 1: Craney Island Rail Connector and Surrounding Area

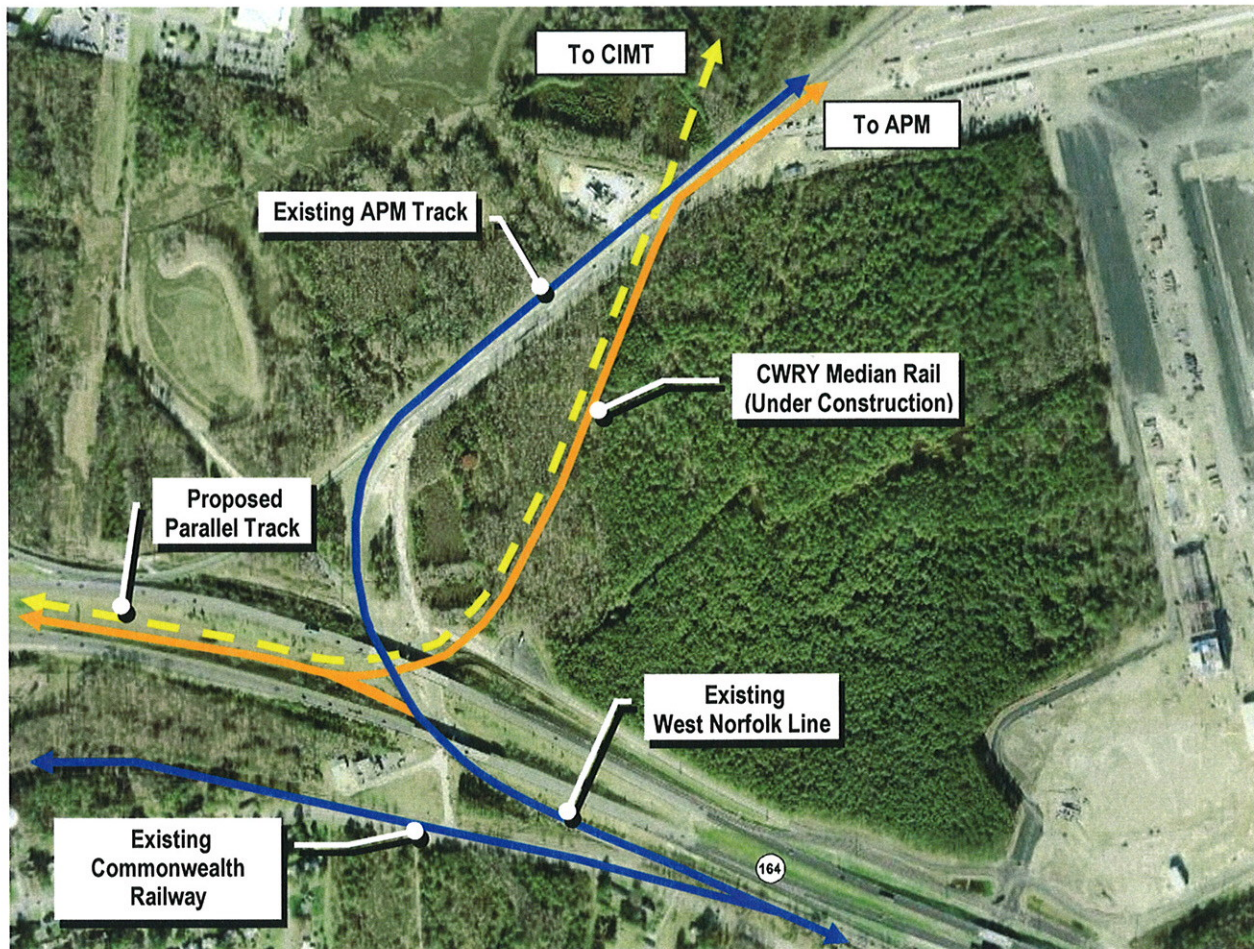


Figure 2: APM and CIMT Track Interface

Figure 2 shows a close up of the current and proposed APM and CIMT track interfaces. Current train staging and sequencing operations at the APM Terminal are conducted using the existing APM Lead to the West Norfolk Line of the Commonwealth Railway. This operation involves the assembly, staging, and sequencing of very long trains (6,000 to 8,000 feet). Due to the shortage of track length at the APM terminal, this operation results in the obstruction of rail traffic movement along the Commonwealth Railway mainline track. Once the CIMT begins transporting containerized cargo by rail, this operation, as it is currently conducted, will result in significant obstructions and delays to CIMT rail movement. The proposed CIRC would provide over 19,000 feet of siding track parallel to the mainline track, which would facilitate free-flowing access to both terminals, and allow train assembly, staging, and sequencing operations to be conducted without obstructing mainline rail traffic movement.

The CIRC is divided into two phases. Phase I of the project is the construction of a siding track in the median of Route 164 from the Highway 17 Bridge to the APM Terminal track interface. Phase II includes the planning and design of a section of track from the APM Terminal to CIMT. Phase I is currently ready to go to construction. The grading in the median of Route 164 is

already complete and the Phase I section can receive track with minimal design effort. The Phase II section, from CIMT to APM, is still in the planning stage, and will require the development of a design-build request for proposal, along with preliminary engineering and detailed design work, to include environmental assessment/permitting, route/site surveying, geotechnical analysis, and utility mapping.

Phase I construction and Phase II detailed design are scheduled to begin in 2010. Phase II construction is scheduled to begin in 2011. Both phases of CIRC construction must be completed by the end of 2013 in order to support CIMT construction beginning in early 2014.

Relationship to Other Projects under Development by Applicant or Previously Funded by this Program:

There are three projects relevant to the CIRC: Craney Island Dredged Material Management Area (CIDMMA) Eastward Expansion; construction of the Craney Island Marine Terminal (CIMT); and the Commonwealth Railway Mainline Safety Relocation Project (CRMSRP).

CIDMMA Eastward Expansion

The CIDMMA is a Federally-owned and U. S. Army Corps of Engineers (USACE) -operated dredged material placement area that is open for public and private dredged material from the Norfolk Harbor and adjacent waters. The CIDMMA has been in continuous use since 1957, serving the dredging needs of the Norfolk Harbor. Originally designed for a life span of 20 years, with a capacity of 96 million cubic yards, the CIDMMA has over 225 million cubic yards of dredged material deposits as of the end of 2004. Without adding additional dredged material placement capacity, the CIDMMA is projected to reach its useful life in 2025.

To extend the useful life of the CIDMMA, the USACE completed an Environmental Impact Statement in 2006 which recommended an eastward expansion. Encompassing 580 acres, the expansion would not only extend the useful life of the CIDMMA, it would provide additional acreage for long-term berthing and landside port facilities, and possibly serve as a logistical and tactical area supporting deployment of national defense forces. At an estimated project cost of \$712 million, construction of the supporting dikes is scheduled to begin in 2009 followed by filling with dredge material beginning in 2011.

Craney Island Marine Terminal

Shipment of marine containers through the ports of Hampton Roads has been growing rapidly and is projected to triple in volume by 2030. To support this demand, the VPA developed a plan for its fourth marine terminal in the Hampton Roads area which would be located on the 580 acre eastward expansion of the CIDMMA. CIMT will provide 8400 linear feet of wharf, 20 Suez-class cranes, and an on-terminal Intermodal Container Transfer Facility. Terminal construction will be in four phases, with the first phase scheduled to begin in 2014, with completion by 2017. Initial Phase I terminal operations will begin in 2017, with a capacity of handling 1.0 million twenty-foot equivalent-length units (TEUs) of containerized cargo. Final Phase IV terminal

build-out will be completed by 2032, and provide a 2.5 million TEU capacity. Total project cost is estimated at \$1.7 billion.

At peak capacity, 50% of the containerized cargo will move by rail: 714,286 containers/year, which equates to 2800 containers/day or 7 to 8 trains/day traveling to and from the CIMT. Movement of this cargo will require a well-designed multi-modal link between the CIMT and the existing road and rail transportation network located about 2 miles south of the CIDMMA. By increasing rail cargo movement up to 50 percent, CIMT truck traffic and congestion on Commonwealth highways will be significantly reduced.

Commonwealth Railway Mainline Safety Relocation Project (CRMSRP)

VPA is the lead state agency for this project, costing approximately \$60 million. The first phase of the project, partially funded with \$4.8 million in FY 07 Rail Enhancement Funds, is complete and involved the environmental review and preliminary engineering for the relocation of the existing Commonwealth Railway (CWRY) mainline track to the medians of I-664 & Route 164 from APM to Bowers Hill. The second phase of the project includes final design and construction of a single track for the entire project length. Final design is complete; construction is 30% complete and scheduled to be complete by December 2009.

Public Benefit of Project

Together with the eastward expansion of the CIDMMA, the CIMT will provide over \$5 billion in total state and regional economic activity, create more than 54,000 new port-related jobs paying over \$1.7 billion in annual wages, and generate state and local tax revenues of \$155 million. This significant economic impact will come from marine terminal design and construction, terminal and port related containerized cargo transportation operations, and import-export supply chain distribution center operations.

The economic impacts of the CIMT will go far beyond terminal construction and port operations, to impact various interdependent economic sectors within the entire Hampton Roads community. The CIRC will be critical to efficient and effective CIMT transportation operations, and through its direct road and rail corridor, provide vital access to the region's and nation's multimodal transportation network.

Placement of the siding track parallel to the mainline Commonwealth Railway within the median of the Route 164 Western Freeway will significantly improve rail capacity and allow simultaneous assembly, staging, and routing of trains transporting high volumes of containerized cargo both inbound to and outbound from both the APM and CIMT terminals.

This project supports the following VTrans2025 goals:

- a. Provide a safe, secure and integrated transportation system that reflects different needs of the Commonwealth *by providing an alternate means through which containerized cargo can be transported by rail vice truck, thus helping to decrease traffic volume on Commonwealth highways.*
- b. Facilitate the efficient movement of people and goods and expand choices and improve interconnectivity of all transportation modes *by increasing the efficiency and effectiveness of rail transport and decreasing the number of truck movements along Commonwealth highways.*
- c. Improve Virginia's economic vitality and provide access to economic opportunities for all Virginians *by increasing Port competitiveness and providing vital access to regional and national markets and multimodal transportation networks.*
- d. Improve the quality of life for Virginians and the coordination of transportation, land use and economic development planning activities *by shifting some of the marine terminal transportation load from road to rail, thus reducing congestion on Commonwealth highways.*

The project also supports the following Virginia State Rail Plan goals:

- a. Promote safety and security *by reducing the number of trucks on Commonwealth highways by providing the means to shift up to 50% of marine terminal containerized cargo transport to rail.*
- b. Improve system capacity, reliability and speed *by facilitating increased container throughput at CIMT and mitigating highway traffic congestion.*
- c. Improve intermodalism, connectivity and mobility *by increasing the rail share of intermodal traffic at CIMT, and enabling an additional main line rail carrier, CSX, to have access to CIMT.*
- d. Improve Virginia's economic competitiveness and quality of life *by reducing the cost of handling containers at CIMT, reducing congestion on roads, and reducing air pollution by reducing truck traffic from terminal operations.*
- e. Support Virginia DRPT Public-Private partnership efforts and program delivery *by ensuring the project provides an excellent return on investment in terms of enhanced productivity, air quality improvement, and reduced congestion.*

Type of Project: Rail Facility & Infrastructure

Application Scope of Work Covers: Construction of CIRC Phase I; Planning and Design of CIRC Phase II.

Project Budget Summary:

CIRC Phase I construction is estimated to cost \$9.2 million. Preparation of the Phase II design-build proposal, including preliminary engineering and final design, is estimated to cost \$11 million.

Local Match Required by Applicant:

The Virginia Port Authority (VPA) is requesting Rail Enhancement Funds (REF) to help cover the construction of CIRC Phase I, along with the preliminary engineering, environmental assessment/permitting, and design of the CIRC Phase II. These costs are estimated at \$9.2 million for Phase I and \$11 million for Phase II. VPA will provide a 30% match (\$6.060 million) through terminal revenue funds from Virginia International Terminals (VIT) operations. The total corresponding amount of funding assistance through REF for both CIRC Phases I and II is \$14.14 million.

Project Implementation Schedule (based in months). List major milestones of the project.

Phase I construction is planned to begin in January 2010 concurrent with Phase II design. Phase I construction should be complete by December 2010, in order to provide a seamless transition to Phase II construction, beginning in early 2011.

The Phase II project schedule includes the following major items:

| Item | Start | Finish |
|-------------------------------------|-------|--------|
| Land/Right-of-Way Acquisition | 2009 | 2010 |
| Environmental Assessment/Permitting | 2009 | 2010 |
| Utility Mapping/Relocations | 2009 | 2010 |
| Preliminary Engineering | 2009 | 2010 |
| Design-Build Contract (Rail Design) | 2010 | 2011 |
| D-B Contract (Rail Construction) | 2011 | 2013 |

Timely acquisition of land and/or right-of-way easements for the property on which the CIRC will be constructed is critical to maintaining the project timeline. Planned design of Phase II in 2010 and completion of both Phase I and Phase II construction by the end of 2013 is to be in time to provide critical support the CIMT Phase 1 construction, starting in early 2014.

Statement of how this project promotes or does not preclude dual/multi-access use.

Both Class I Rail Roads (Norfolk Southern and CSX) will have access to the CIMT and APM via the Commonwealth Railway short-line.

List additional users of rail line, facility, and/or equipment.

Commonwealth Railway will provide access to both Class I Railroads. The CIMT will be a public use facility, expected to serve all of the 40+ shippers that move goods through the port.

Identify possible environmental issues/concerns within the scope of this project.

Anticipated environmental challenges that may be associated with project include: APM Restrictive Covenant Modification; Wetlands Mitigation.

Required Attachments:

1. Attachment A – Project Data Information Form (Provided)
2. Attachment B – Application Checklist (Provided)
3. Detailed cost, budget, and schedule. Include preliminary engineering to 30% report, if applicable (Sample in Appendix D)
4. Certification of Match/% of Match/Documentation of Source of Match, Including Defined Match Source (Provided by Applicant)
5. Certification of Additive Investment (Provided by Applicant)
6. Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project
7. Statement from the owner of the facility that acknowledges the Commonwealth will have a public interest in private facilities impacted by this project (Provided by Applicant)

Application and Attachment Certification

To the best of my knowledge, all information contained in this application and its attachments is true. The information provided to the Virginia Department of Rail and Public Transportation (DRPT) is subject to full disclosure, except where protected by Virginia Code. Any additional documentation related to this application will be provided to DRPT upon request.

Authorized Signature and Title:

Date: 3.31.08

Attachment A

Form A1 – Project Cost and Construction Period

First Construction Year: 2010

Last Construction Year: 2013

| Year | Total Project COST | Total DRPT COST |
|--------------|---------------------------|------------------------|
| 2009 | \$ 3,000,000 * | \$ 2,100,000 |
| 2010 | \$ <u>17,200,000</u> ** | \$ <u>12,040,000</u> |
| Total | \$ 20,200,000 | \$ 14,140,000 |

Notes:

* \$3 million for Phase II Preliminary Engineering/Environmental Assessment

** \$8 million for Phase II Design; \$9.2 million for Phase I Construction

Attachment A
Form A2 – Freight Service

| Demand | CATEGORY | UNITS | VALUE |
|--------|---|---------------|---------|
| | Steady State Demand – diversion of freight to rail from trucks: 2,500K TEU (20-ft equivalent-length units) / 4 20-foot units (containers) / railcar | Carloads/Year | 625,000 |
| | First Year of Diversion (625,000 / 15 years) | Carloads/Year | 41,667 |
| | Number of Years until steady state | Years | 15 |

| Project Impact on | CATEGORY | UNITS | VALUE |
|-------------------|--|-------|-------|
| | Rail Miles in Virginia (existing routing before project): 13,000 ft/ 5280 ft/mile | Miles | 2.46 |
| | Rail Miles in Virginia (routing after project completion): 37,000 ft/ 5280 ft/mile | Miles | 7.01 |
| | Number of Years until steady state | Years | 15 |

| Conversions | CATEGORY | UNITS | VALUE |
|-------------|--|-----------------------|-------|
| | Railcars per Train (6000 feet per train/60 feet per railcar) | Railcars/Train | 100 |
| | Rail Tons per Railcar (maximum payload for 20-ft container) | Tons/Railcar | 23.76 |
| | Trucks per Railcar (TEUs) | Trucks (TEUs)/Railcar | 4 |

| Other | CATEGORY | UNITS | VALUE |
|-------|--|----------------|----------------|
| | Change in Daily Delay for Freight Trains | Railcars/Train | Not Applicable |
| | Reduction in Number of Rail At-Grade Crossings | Tons/Railcar | Not Applicable |

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A5 – Demand Characteristics for 16-Year Performance Period

| Performance Year | Performance Value * Containers (TEUs)/Year |
|------------------|---|
| 1 | 600,000 |
| 2 | 600,000 |
| 3 | 600,000 |
| 4 | 600,000 |
| 5 | 600,000 |
| 6 | 782,500 |
| 7 | 975,000 |
| 8 | 1,350,000 |
| 9 | 1,350,000 |
| 10 | 1,725,000 |
| 14 | 1,725,000 |
| 12 | 1,900,000 |
| 13 | 2,100,000 |
| 14 | 2,300,000 |
| 15 | 2,500,000 |

* For Freight Service Projects – Car Loads or Containers per Year

**Rail Enhancement Fund
Project Application Checklist
Attachment B**

Date: March 31, 2008

Name of Applicant and Project:

Virginia Port Authority
Craney Island Rail Connector

Checklist for Application

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.

☒ Yes ☐ No

2. Project is an Additive Investment to Virginia.

☒ Yes ☐ No

3. Project provides for, or does not preclude, shared or dual access opportunity.

☒ Yes ☐ No

4. Applicant has provided documentation and certification of at least a minimum 30% match.

☒ Yes ☐ No

5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.

☒ Yes ☐ No

6. Application is complete, including signature and specified number of copies provided, and Applicant has reviewed the Standard Agreement as provided in Appendix C.

☒ Yes ☐ No

**Craney Island Rail Connector
Detailed Project Budget Summary**

| Scope of Work | Amount |
|--|--------------------------------------|
| Phase I Construction | \$ 9,200,000 |
| Phase II Preliminary Engineering; Environmental Assessment | \$ 3,000,000 |
| Phase II Design | \$ 8,000,000 |
| Total | <u>\$ 20,200,000</u> |
| Funding Cost share | Amount |
| DRPT Participation (70.0%) | \$ 14,140,000 |
| VPA Local Match (30.0%) | \$ 6,060,000 |
| Year | Project Costs |
| 2009 | \$ 3,000,000 * |
| 2010 | \$ 17,200,000 ** |
| Total | <u>\$ 20,200,000</u> |
| | Rail Enhancement Funds (DRPT) |
| | \$ 2,100,000 |
| | <u>\$ 12,040,000</u> |
| | \$ 14,140,000 |

Notes:

- * \$3 million for Phase II Preliminary Engineering/Environmental Assessment
- ** \$8 million for Phase II Design; \$9.2 million for Phase I Construction

Craney Island Rail Connector

Detailed Project Schedule

| <u>Scope of Work</u> | <u>Milestone Dates</u> |
|--|------------------------|
| Complete Phase II Preliminary Engineering | June 2009 |
| Complete Phase II Environmental Assessment/Permitting | December 2009 |
| Begin Phase II Design (Design-Build Contract) | January 2010 |
| Begin Phase I Construction | January 2010 |
| Complete Phase II Design | December 2010 |
| Complete Phase I Construction | December 2010 |
| Begin Phase II Construction (Design-Build Contract) * | January 2011 |
| Complete Phase II Construction (Design-Build Contract) * | December 2013 |

* Note: Funding for Phase II construction not part of this REF application

Certification of Match

The Virginia Port Authority (VPA) has applied to the Commonwealth of Virginia for Department of Rail and Public Transportation Rail Enhancement Funds in the amount of \$14,140,000 to assist in funding the preliminary engineering, environmental assessment, design, and construction of the Craney Island Rail Connector. The project cost is \$20,200,000. The percentage of Rail Enhancement Funding requested is 70.0% of the estimated project cost.

As an attachment to the funding application, this document certifies that VPA will provide a 30.0% funding match in the amount of \$6,060,000 from revenue generated from Virginia International Terminals (VIT) terminal operations (as opposed to Commonwealth Port Funds provided by the Commonwealth of Virginia), which constitutes the remaining balance of the estimated cost.



Jeff Florin
Virginia Port Authority
Chief Engineer

Certification of Additive Investment

This certifies that the Commonwealth of Virginia Rail Enhancement Funds requested in this application will add significant capital improvements to the state's rail infrastructure, and result in public benefits to the Commonwealth that are greater than the actual amount of public funds invested.

A handwritten signature in blue ink, appearing to read 'Jeff Florin', is positioned above the printed name.

Jeff Florin
Chief Engineer
Virginia Port Authority

Statement from the Applicant
SWAM Participation Goals to be Achieved by the Project

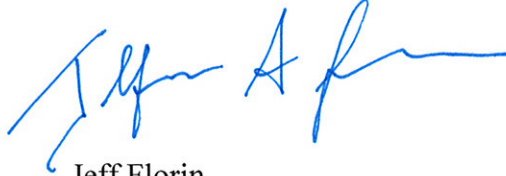
This is to certify that the Virginia Port Authority will work to achieve the Small, Women-owned, and Minority-owned (SWAM) participation goals in the project for which these Rail Enhancement Funds are requested, as directed by Executive Order 33 (2006) from the Governor of the Commonwealth of Virginia.



Jeff Florin
Chief Engineer
Virginia Port Authority

Statement from the Applicant
Acknowledgement of Commonwealth Public Interest

This statement from the Virginia Port Authority acknowledges that the Commonwealth of Virginia will have a public interest in the facilities, materials, equipment, and improvements funded or impacted by this project.

A handwritten signature in blue ink, appearing to read 'Jeff Florin', is positioned above the printed name and title.

Jeff Florin
Chief Engineer
Virginia Port Authority